

SECRET

2. The method of claim 1 wherein setting a maximum allowed vehicle deceleration based on the vehicle speed includes adjusting the maximum allowed vehicle deceleration in an inverse relationship to the vehicle speed.

Sub B2

1 5. The method of claim 2 wherein the
2 maximum allowed vehicle deceleration is capable of
3 varying continuously.

Sub B3
A2

6. The method of claim 5 wherein the
maximum allowed vehicle deceleration is capable of
varying in a range between about 0.2 g and about
0.3 g.

7. The method of claim 2 wherein the
maximum allowed vehicle deceleration is an exponential
function of the vehicle speed.

8. The method of claim 4 wherein the
maximum allowed vehicle deceleration is defined by the
equation:

$$\text{MAXDECEL} = 0.2 + 160/(\text{VEHSPD} + 40)^2,$$

where MAXDECEL is the maximum allowed vehicle
deceleration, and VEHSPD is the vehicle speed.

9. In an adaptive speed control system for
a vehicle, a system for controlling vehicle
deceleration, the system comprising:

a receiver capable of receiving an input
signal indicative of a speed of the vehicle; and

a controller capable of setting a maximum
allowed vehicle deceleration based on the vehicle
speed.

10. The system of claim 9 wherein, to set a
maximum allowed vehicle deceleration based on the

3 vehicle speed, the controller is capable of adjusting
4 the maximum allowed vehicle deceleration in an inverse
5 relationship to the vehicle speed.

B4
Sub A3

11. The system of claim 10 wherein, to
2 adjust the maximum allowed vehicle deceleration, the
3 controller is capable of decreasing the maximum
4 allowed vehicle deceleration as the vehicle speed
5 increases.

12. The system of claim 10 wherein, to
2 adjust the maximum allowed vehicle deceleration, the
3 controller is capable of increasing the maximum
4 allowed vehicle deceleration as the vehicle speed
5 decreases.

13. The system of claim 10 wherein the
2 maximum allowed vehicle deceleration is capable of
3 varying continuously.

B5
Sub A4

14. The system of claim 13 wherein the
2 maximum allowed vehicle deceleration is capable of
3 varying in a range between about 0.2 g and about
4 0.3 g.

15. The system of claim 10 wherein the
2 maximum allowed vehicle deceleration is an exponential
3 function of the vehicle speed.

10 9
1 ~~18~~. The system of claim ~~15~~ wherein the
2 maximum allowed vehicle deceleration is defined by the
3 equation:

4
$$\text{MAXDECEL} = 0.2 + 160/(\text{VEHSPD} + 40)^2,$$

5 where MAXDECEL is the maximum allowed vehicle
6 deceleration, and VEHSPD is the vehicle speed.

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add B6